depletion of NOS substrates and co-factor.

L6 ANSWER 2 OF 3 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN
TI Disruption of Rho signaling results in progressive atrioventricular conduction defects while ventricular function remains preserved
AU Wei L (Reprint); Taffet G E; Khoury D S; Bo J; Li Y; Yatani A; Delaughter M C; Klevitsky R; Hewett T E; Robbins J; Michael L H; Schneider M D; Entman M L; Schwartz R J
SO FASEB JOURNAL, (MAR 2004) Vol. 18, No. 3, pp. 857-+.
ISSN: 0892-6638.
PY 2004
AB Recent studies suggest that RhoA and Rac1 mediate hypertrophic signals in cardiac myocyte hypertrophy. However, effects on cardiac function caused by inhibition of their activity in the heart have yet to be evaluated. Cardiac-specific inhibition of Rho family protein activities was achieved by expressing Rho GDIalpha, an endogenous specific GDP dissociation inhibitor for Rho family proteins, using the alpha-myosin heavy-chain promoter. Increased expression of Rho GDIa led to atrial arrhythmias and mild ventricular hypertrophy in adult mice (4-7 months). However, left ventricular systolic and diastolic function was largely preserved before and after the development of cardiac hypertrophy, indicating that Rho GTPases are not required to maintain ventricular contractile function under basal physiological condition. Electrocardiography and intracardiac electrophysiological studies revealed first-degree atrioventricular (AV) block in the transgenic heart at 1 week of age, which further progressed into second-degree AV block at 4 weeks of age before the development of cardiac hypertrophy. Expression of connexin 40 dramatically decreased from 1 week to 4 weeks of age in the transgenic heart, which may contribute in part to the conduction defects in the transgenic mice. This study provides novel evidence for an important role of Rho GTPases in regulating AV conduction.

=> d his

(FILE 'HOME' ENTERED AT 12:13:18 ON 24 JAN 2008)

FILE 'MEDLINE' ENTERED AT 12:13:37 ON 24 JAN 2008
L1 327 S CONNEXIN 40 OR CXN40
L2 68613 S TRANSGENIC
L3 2 S L1 (S) L2

FILE 'BIOSIS, CABA, EMBASE, CAPLUS' ENTERED AT 12:18:26 ON 24 JAN 2008
L4 12 S L3

FILE 'PCTFULL' ENTERED AT 12:27:23 ON 24 JAN 2008
L5 0 S L3

FILE 'DISSABS, SCISEARCH' ENTERED AT 12:28:24 ON 24 JAN 2008
L6 3 S L3

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.30	69.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-6.40